

Amendments to the Claims:

This listing of claims will replace all prior versions and listings of claims in the application:

Listing of Claims:

1. (currently amended) A receiver for processing a received signal, said receiver being multimode, comprising: a single RF chip for processing the received signal in any mode, said chip comprising a spreading section for spreading and down-converting to baseband the received signal and a channel filtering section for DC offsets rejection on the received signal, and a single baseband chip comprising despreading means for despreading a spread signal, wherein the baseband chip further comprises channel filter coefficient banks with associated filters for each mode for rejecting adjacent carrier frequencies on the associated spread received signal, and a matching filter for producing the same distortion of a spread signal on a corresponding despreading sequence.
2. (previously presented) The receiver as claimed in claim 1, wherein the spreading section is adapted to produce a spread spectrum oscillator signal and a spreading sequence, in order to expand the bandwidth of a received signal.
3. (previously presented) The receiver as claimed in claim 1, wherein the spreading section further comprises unique rejection means for all the modes for suppressing the adjacent carrier frequencies of the associated received signals.
4. (previously presented) The receiver as claimed in claim 1, wherein the channel filtering section is common for all the modes.

5. (previously presented) The receiver as claimed in claim 1, wherein the channel filtering section comprises: a block of low-noise amplifier and associated mixers for each mode, and unique first rejection means for rejecting DC offsets on a spread received signal for any mode.

6. (previously presented) The receiver as claimed in claim 5, wherein the channel filtering section further comprises adding means for redirecting a spread received signal coming from a block of low-noise amplifier and associated mixers to the first rejection means.

7. (cancelled)

8. (previously presented) The receiver as claimed in claim 1, wherein the despreading means comprise: a single multiplier, and a single correlator with integration and dump means.

9. (previously presented) The receiver as claimed in claim 1, wherein the baseband chip further comprises synchronization means for synchronizing a spread signal with a corresponding despreading sequence.

10. (currently amended) A method for receiving a signal in any mode, comprising: spreading and down-converting the received signal to baseband, rejecting the DC offsets on the received signal using a single RF chip, and despreading the spread signal, using a single baseband chip, wherein the baseband chip further comprises channel filter coefficient banks with associated filters for each mode for rejecting adjacent carrier frequencies on the associated spread received signal, and a matching filter for producing the same distortion of a spread signal on a corresponding despreading sequence.

11. (previously presented) The method for receiving a signal as claimed in claim 10, further comprising producing a spread spectrum oscillator signal and a spreading sequence in order to expand the bandwidth of the received signal.
12. (previously presented) A mobile phone comprising a receiver as claimed in claim 1.
13. (new) A receiver for processing a received signal, said receiver being multimode, comprising: a single RF chip for processing the received signal in any mode, said chip comprising a spreading section for spreading and down-converting to baseband the received signal and a channel filtering section for DC offsets rejection on the received signal, and a single baseband chip comprising despreading means for despread a spread signal, wherein the channel filtering section comprises a block of low-noise amplifier and associated mixers for each mode, and unique first rejection means for rejecting DC offsets on a spread received signal for any mode, as well as adding means for redirecting a spread received signal coming from the block of low-noise amplifier and associated mixers to the first rejection means.
14. (new) The receiver as claimed in claim 13, wherein the spreading section is adapted to produce a spread spectrum oscillator signal and a spreading sequence, in order to expand the bandwidth of a received signal.
15. (new) The receiver as claimed in claim 13, wherein the spreading section further comprises unique rejection means for all the modes for suppressing the adjacent carrier frequencies of the associated received signals.
16. (new) The receiver as claimed in claim 13, wherein the channel filtering section is common for all the modes.

17. (new) The receiver as claimed in claim 13, wherein the baseband chip further comprises: channel filter coefficient banks with associated filters for each mode for rejecting adjacent carrier frequencies on the associated spread received signal, and a matching filter for producing the same distortion of a spread signal on a corresponding despreading sequence.
18. (new) The receiver as claimed in claim 13, wherein the despreading means comprise: a single multiplier, and a single correlator with integration and dump means.
19. (new) The receiver as claimed in claim 13, wherein the baseband chip further comprises synchronization means for synchronizing a spread signal with a corresponding despreading sequence.
20. (new) A mobile phone comprising a receiver as claimed in claim 13.